

Amendments to the Claims

1-35. (Canceled)

36. (Currently amended) A two-way actuator formed of composite material, wherein the composite material comprises:

- (i) a first component comprising a first shape memory alloy; and
- (ii) a second component comprising an elastic metal;

wherein said first component and said second component are metallurgically bonded together to form said composite material;

wherein said two-way actuator has a first shape at a temperature equal to or above a temperature A_f at which transformation of the first component from martensite to austenite is complete, and said two-way actuator has a second shape at a temperature equal to or below a temperature M_f at which transformation of the first component from austenite to martensite is complete;

wherein at a temperature equal to or above A_f , said first shape memory alloy exerts a force against said second component which elastically deforms said second component so that said two-way actuator has said first shape;

wherein at a temperature equal to or below M_f , said force from said first shape memory alloy is at least partially released and a bias force of said second component acting on said first shape memory alloy returns the two-way actuator to said second shape; and

wherein the two-way actuator has one or more finger portions for grasping body tissue.

~~wherein A_f and M_f allow actuation of the two-way actuator at temperatures suitable for use on a subject's body tissue.~~

37. (Currently amended) The two-way actuator of claim 36, wherein M_f is greater than approximately 0°C .

38. (Currently amended) The two-way actuator of claim 36, wherein M_f is greater than about 35°C ~~approximately body temperature.~~

39. (Currently amended) The two-way actuator of claim 36, wherein A_f is greater than about 35° C less than approximately 100° C.

40. (Currently amended) The two-way actuator of claim 36, wherein the first shape memory alloy component is nitinol.

41. (Currently amended) The two-way actuator of claim 36, wherein the elastic metal second component is selected from the group consisting of a second shape memory alloy, stainless steel, cobalt alloy, refractory metal or alloy, precious metal, titanium alloy, nickel superalloy, and combinations thereof.

42. (Currently amended) The two-way actuator of claim 41, wherein the elastic metal second component is selected from the group consisting of nitinol, stainless steel 316, austenitic stainless steels, precipitation hardenable steels including 17-4PH, 15-4PH and 13-8Mo, MP35N, ELGILOY®, Ta, Ta-10W, W, W--Re, Nb, Nb1Zr, C-103, Cb-752, FS-85, T-111, Pt, Pd, beta Ti, Ti6Al4V, Ti5Al2.5Sn, Beta C, Beta III, and FLEXIUM®.

43. (Currently amended) The two-way actuator of claim 36, wherein the elastic metal has a modulus of elasticity equal to or greater than that of stainless steel wherein the first component and the second component form a bi-layer, tri-layer, or intermittent layer structure.

44-50. (Canceled)

51. (New) An article of manufacture, comprising:
a hollow tube comprising an elastic metal; and
a plurality of discrete elements disposed within the wall of the hollow tube such that each discrete element is not in contact with another discrete element;
wherein the discrete elements comprise a shape memory alloy.

52. (New) The article of claim 51, wherein each of the discrete elements are in the form of a

strip that is longitudinally disposed within the wall of the hollow tube.

53. (New) The article of claim 51, wherein the plurality of discrete elements are metallurgically bonded to the hollow tube.

54. (New) The article of claim 51, wherein the article has a first shape at a temperature equal to or above a temperature A_f at which transformation of the shape memory alloy from martensite to austenite is complete;

wherein the article has a second shape at a temperature equal to or below a temperature M_f at which transformation of the shape memory alloy from austenite to martensite is complete;

wherein at a temperature equal to or above A_f , the discrete elements exert a force against the hollow tube to elastically deform the hollow tube so that the article assumes the first shape; and

wherein at a temperature equal to or below M_f , the force from the discrete elements is at least partially released so that the article assumes the second shape.

55. (New) The article of claim 51, wherein the shape memory alloy is nitinol.

56. (New) The article of claim 51, wherein the elastic metal is selected from the group consisting of a second shape memory alloy, stainless steel, cobalt alloy, refractory metal or alloy, precious metal, titanium alloy, nickel superalloy, and combinations thereof.

57. (New) The article of claim 51, wherein the elastic metal is selected from the group consisting of nitinol, stainless steel 316, austenitic stainless steels, precipitation hardenable steels including 17-4PH, 15-4PH and 13-8Mo, MP35N, ELGILOY, Ta, Ta-10W, W, W--Re, Nb, Nb1Zr, C-103, Cb-752, FS-85, T-111, Pt, Pd, beta Ti, Ti6Al4V, Ti5Al2.5Sn, Beta C, Beta III, and FLEXIUM.